- \* Please read this owner's manual in its entirety before operating this equipment.
- \* After reading this manual, be sure to keep it in a handy place (e.g., glove compartment).
- \* Check the contents of the enclosed warranty card and keep it carefully with this manual.
- \* This manual includes the operating procedures of the CD changer, MD changer and TV connected via the CeNET cable. The CD changer, MD changer and TV tuner have their own manuals, but no explanations for operating them are described.

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# 1. FEATURES

- 8-Times Oversampling Digital Filter and Dual 1-Bit D/A Converters
- Zero-Bit Detector<sup>™</sup> Mute Circuit
- Full Logec Tape Transport with True Function / Auto Reverse with Dual Azimuth Adjust
- Dolby® B Noise Reduction
- MAGI-TUNE® FM Reception System
- Controller for Optional TV Tuner Modules
- Capability to Read CD TEXT Data from Clarion Compatible CD Changer
- Z-Enhancer with 3 Adjustment Modes
- Repeat / Random Play / Intro Music Scan
- CeNET with Balanced Audio Line Transmission and Dynamic Noise Canceling
- Multi-color FL Display
- Bass Control Center Frequency: 30Hz / Boost Level: ±13dB
- 4-Channel RCA Line Level Output with Fader Control
- 180W(45W×4) Maximum Power Output

# 2. PRECAUTIONS

- 1. When the inside of the car is very cold and the player is used soon after switching on the heater, moisture may form on the disc or the optical parts of the player and proper playback may not be possible. If moisture forms on the disc, wipe it off with a soft cloth. If moisture forms on the optical parts of the player, do not use the player for about one hour. The condensation will disappear naturally allowing normal operation.
- 2. Driving on extremely bumpy roads which cause severe vibration may cause the sound to skip.
- 3. This unit uses a precision mechanism. Even in the event that trouble arises, never open the case, disassemble the unit, or lubricate the rotating parts.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to consult the dealer or an experienced radio/TV technician for help.

USE OF CONTROLS, ADJUSTMENTS, OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN, MAY RE-SULT IN HAZARDOUS RADIATION EXPO-SURE.

**A**CAUTION

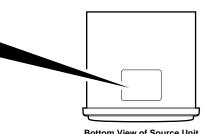
THE COMPACT DISC PLAYER SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE **EXCEPT PROPERLY QUALIFIED SERVICE** PERSONNEL.

CHANGES OR MODIFICATIONS NOT EX-PRESSLY APPROVED BY THE MANUFAC-TURER FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

#### INFORMATION FOR USERS:

CHANGES OR MODIFICATIONS TO THIS PRODUCT NOT APPROVED BY THE MANU-FACTURER WILL VOID THE WARRANTY AND WILL VIOLATE FCC APPROVAL.





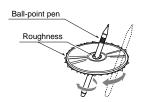
## Handling Compact Discs

Use only compact discs bearing the first mark.

Do not play heart-shaped, octagonal, or other specially shaped compact discs.

#### Handling

 New discs may have some roughness around the edges. If such discs are used, the player may not work or the sound may skip. Use a ball-point pen or the like to remove any roughness from the edge of the disc.



- Never stick labels on the surface of the compact disc or mark the surface with a pencil or pen.
- Never play a compact disc with any cellophane tape or other glue on it or with peeling off marks.
   If you try to play such a compact disc, you may not be able to get it back out of the CD player or it may damage the CD player.
- Do not use compact discs that have large scratches, are misshapen, cracked, etc. Use of such discs may cause misoperation or damage.

- To remove a compact disc from its storage case, press down on the center of the case and lift the disc out, holding it carefully by the edges.
- Do not use commercially available CD protection sheets or discs equipped with stabilizers, etc. These may damage the disc or cause breakdown of the internal mechanism.

#### Storage

- Do not expose compact discs to direct sunlight or any heat source.
- Do not expose compact discs to excess humidity or dust.
- Do not expose compact discs to direct heat from heaters.

#### Cleaning

- To remove fingermarks and dust, use a soft cloth and wipe in a straight line from the center of the compact disc to the circumference.
- Do not use any solvents, such as commercially available cleaners, anti-static spray or thinner to clean compact discs.
- After using special compact disc cleaner, let the compact disc dry off well before playing it.

# Handling Cassette Tapes

Using any of the following types of cassette tapes can cause malfunctions.

- Cassette tapes with low recording levels
- Cassette tapes in which the unrecorded section between songs is shorter than 4 seconds
- Cassette tapes with noise or the like recorded between songs
- Cassette tapes on which there are long unrecorded sections in the middle of a song

### Handling precautions

 Slack in the tape can cause malfunctions. In particular for prerecorded cassette tapes and 90-minute tapes, take up any slack in the tape before inserting it into the cassette player.

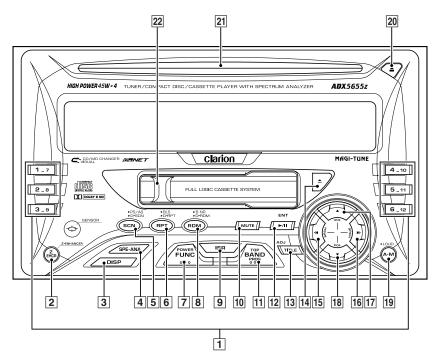
- Avoid using cassettes of 120 minutes or longer. (Such cassettes have extremely thin tape, so the tape can become stretched or cut.)
- Periodically play a cleaning cassette in the player to clean the head.
- Keep magnets, screwdrivers, and other iron and steel and magnetic items away from both cassette tapes and the tape head in the player.
- · Do not oil the cassette mechanism.
- Do not use any cassette tapes with peeling labels or deformed cases. Such cassette tapes can cause breakdowns.
- When not using the player, always take the cassette out of the mechanism. Exposing a cassette to direct sunlight, extreme temperatures, or high humidity can damage the cassette.



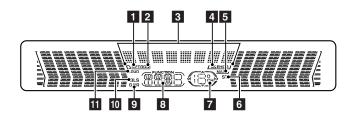
Be sure to unfold and read the next page. Veuillez déplier et vous référer à la page suivante. Cerciórese de desplegar y de leer la página siguiente.



### Source unit / Appareil pilote / Unidad fuente



### Display / Afficheur / Visualizador



**Note:** Be sure to unfold this page and refer to the front diagrams as you read each chapter. **Remarque:** Veuillez déplier cette page et vous référer aux schémas quand vous lisez chaque chapitre.

Nota: Cuando lea los capítulos, despliegue esta página y consulte los diagramas.

# 4. NOMENCLATURE

#### Note:

• Be sure to read this chapter referring to the front diagrams of chapter "3. CONTROLS" on page 5 (unfold).

### Names of Buttons

- The preset buttons (1 to 6)

  Direct buttons (1 to 6) (7 to 12)
- 2 Z-EHCR (z-enhancer) button
- 3 DISP (display) button
- 4 SPE-ANA (spectrum analyzer) button
- 5 SCN (scan) button
  PS/AS (preset scan/auto store) button
- RPT (repeat) buttonBLS (blank skip) button
- POWER button FUNC (function) button
- 8 RDM (random) button
  B NR (Dolby NR) button
- 9 ISR (instant station recall) button
- 10 MUTE button

- BAND (band) buttonTOP buttonPROG (programe) button
- 12 ENT (enter) button Plav/pause button
- 13 TITLE button
  ADJ (adjust) button
- 14 TAPE EJECT button
- 15 Left button
- 16 Right button
- 17 Up button
- 18 Down button
- 19 A-M (audio mode) button LOUD (loudness) button
- 20 CD EJECT button
- 21 CD insertion slot
- 22 Cassette tape insertion slot

### Display Items

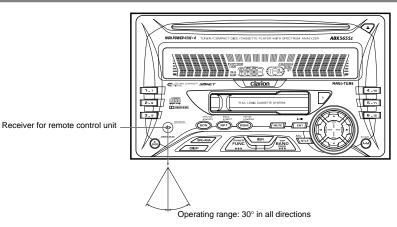
- 1 RPT (repeat) indication
- 2 RDM (random) indication
- 3 Operation status indication
  - \* The frequency, play time, clock, T-scan, D-scan etc. are displayed.
- 4 Z-EHCR (z-enhancer) indication
- 5 MANU (manual) indication
- 6 ST (stereo) indication
- 7 Preset channel indication (1 to 6)

Disc number indication (1 to 12)

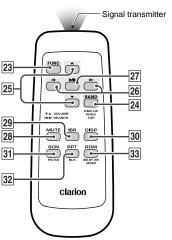
\* The disc numbers corresponding to the discs in the CD or MD changer light.

- 8 Function mode indication
  - \* The names of modes being selected, etc. are displayed.
- 9 B NR (Dolby NR) indication
- 10 BLS (blank skip) indication
- 11 LOUD (loudness) indication

# 5. REMOTE CONTROL



#### Remote control unit



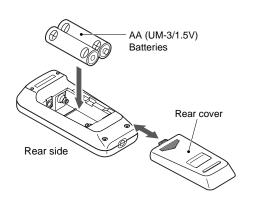
# Inserting the Batteries

- Turn the remote control unit over, then slide the rear cover in the direction of the arrow.
- Insert the AA (UM-3/1.5V) batteries that came with the remote control unit facing in the directions shown in the figure, then close the rear cover.

#### Notes

Using batteries improperly can cause them to explode. Take note of the following points:

- When replacing batteries, replace both batteries with new ones.
- Do not short-circuit, disassemble or heat batteries.
- Do not dispose of batteries into fire or water.
- · Dispose of spent batteries properly.



### Functions of Remote Control Unit Buttons

Mode Button	Radio	CD	Таре	CD changer MD changer	TV		
23 FUNC	Turns power on and off. When pressed and held for 1 second: Turns power off. Switches among radio, CD, Tape, CD changer, MD changer and TV.						
24 BAND DISC UP PROG TOP	Switches reception band.	Plays the first track. Top play.	Switches the side of the tape.	Moves the next disc in increasing order.	Switches reception band.		
25 VOLUME	Increases and decreases volume (in all modes).						
26 SEARCH	Moves preset channels up and down.	Moves tracks up and down. When pressed and held for 1 second: Fast-forward/ fast-backward.	Fast-forward and rewinds tape. APC fast- forward and rewind.	Moves tracks up and down. When pressed and held for 1 second: Fast-forward/ fast-backward.	Moves preset channels up and down.		
27 PLAY/PAUSE	No function.	Switches between playback and pause.	Switches between playback and pause.	Switches between playback and pause.	No function.		
28 MUTE	Turns mute on and off.						
29 ISR	Recalls ISR radio station in memory. Press and hold for 2 seconds or longer: Stores current station into ISR memory (radio mode only).						
30 DISP	Switches among main display, sub display and clock display.						
31 SCN PS/AS	Preset scan. When pressed and held for 2 seconds: Auto store.	Scan play.	Fast-forward scan.	Scan play. When pressed and held for 1 seconds: Disc scan play.	Preset scan. When pressed and held for 2 seconds: Auto store.		
32 RPT BLS	No function.	Repeat play.	Repeat play. When pressed and held for 1 second: Blank tape skip function turns on and off.	Repeat play. When pressed and held for 1 seconds: Disc repeat play.	No function.		
33 RDM DOLBY NR MONI	No function.	Random play.	Select Dolby Noise Reduc- tion mode.	Random play. When pressed and held for 1 seconds: Disc random play.	Switches between TV and VTR.		

<sup>\*</sup> Some of the corresponding buttons on the source unit and remote control unit have different functions.